## IN THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

**LAMINATIONS**, INC., a Pennsylvania :

Corporation :

Plaintiff :

VS. : 3:CV-06-2108

(JUDGE VANASKIE)

ROMA DIRECT MARKETING LLC, :

a/k/a The Garden Patch, JOHN T. : HAWKINS, KENNETH McDOWELL :

Defendants :

#### **MEMORANDUM**

At issue in this litigation is a patent licensed to Plaintiff Laminations, Inc. ("Laminations"), for a plant cultivation apparatus, also known as a self-watering planter. Laminations alleges that Defendants Roma Direct Marketing LLC ("Roma Direct"), John T. Hawkins, and Kenneth McDowell (collectively, "Defendants"), designed, marketed, and sold a competing product – The Garden Patch – that infringes upon its patent.

Presently before the Court is Laminations' Motion for Preliminary Injunction. (Dkt. Entry 8.) Because it has failed to demonstrate either a reasonable likelihood of success on the merits as to its claim of infringement or irreparable harm, Laminations' Motion for Preliminary Injunction will be denied.

#### I. <u>BACKGROUND</u>

#### A. Procedural History

Laminations commenced this litigation on or about October 25, 2006, by filing a three-

count Complaint in this Court. (Dkt. Entry 1.) As relevant here, Laminations alleges in Count I that Defendants' product, The Garden Patch, infringes upon its rights as exclusive licensee of United States Patent No. 5,193,306 ("the '306 Patent"). Specifically, Laminations contends that Messrs. Hawkins and McDowell, former employees of Laminations, used their knowledge of the '306 Patent to create a competing business that designed, marketed, and sold The Garden Patch.

On December 20, 2006, almost two months after initiating this action,, Laminations filed its Motion for Preliminary Injunction, along with a memorandum of law and supporting declarations, including an expert report from Dr. James A. Kirk. (Dkt. Entries 8, 8-3, 9, 11-12, & 14-15.) A telephonic conference on the preliminary injunction motion was held on January 3, 2007, resulting in the issuance of an order providing a deadline for the presentation of an opposition brief and the scheduling of an evidentiary hearing on the motion. (Dkt. Entry 21.) In accordance with that order, Defendants filed a brief in opposition to the motion on January 31, 2007, (Dkt. Entry 24), and a purported expert report from Thomas E. Toner, Esquire, on February 8, 2007. (Dkt. Entry 25.) On February 14, 2007, Laminations filed a reply memorandum of law and a reply declaration of Dr. Kirk. (Dkt. Entry 28.) A hearing on Laminations' motion was held on February 22, 2007, and the parties subsequently submitted

<sup>&</sup>lt;sup>1</sup>This Court has jurisdiction over Laminations' patent infringement action pursuant to 28 U.S.C. § 1331 and 28 U.S.C. § 1338(a).

proposed findings of fact. (Dkt. Entries 34-35 & 37.) The parties' submissions were completed on March 22, 2007.

#### **B.** Findings of Fact

#### 1) The Parties

- 1. Laminations is a Pennsylvania corporation with its principal place of business in Scranton, Pennsylvania. Since its formation in the late 1940's, Laminations' primary business has been the manufacture of plastic products. (Tr. of Hr'g, Feb. 22, 2007 ("Tr."), Dkt. Entry 33, at 6.)
- 2. Roma Direct is a Florida limited liability company with its principal place of business in St. Petersburg, Florida. Roma Direct markets The Garden Patch, a self-watering planter. (<u>Id.</u> at 205.) Roma Direct operates the website <u>www.agardenpatch.com</u>. (LX-1,² Decl. of Frank DiPaolo, ¶ 4.)
- 3. Mr. Hawkins was hired by Laminations in the mid 1990's to work in its marketing department, primarily in Florida. (Tr. at 8.) Mr. Hawkins was a member of Laminations' Executive Committee. (Id. at 18.) He resigned from Laminations in the fall of 2004. (Id. at 19.) Mr. Hawkins is now associated with Roma Direct.
  - 4. Mr. McDowell was hired by Laminations in the mid 1990's to work in its marketing

<sup>&</sup>lt;sup>2</sup>"LX-\_" refers to exhibits introduced by Laminations at the preliminary injunction hearing conducted in this matter.

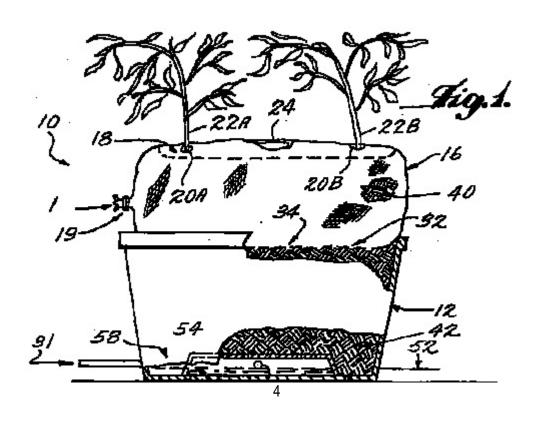
department, primarily in Florida. (<u>Id.</u> at 8, 205.) Mr. McDowell resigned from Laminations in October 2004. (Id. at 205.) He is now associated with Roma Direct. (Id.)

#### 2) The '306 Patent

- 5. The inventor of the '306 Patent is Blake Whisenant. (LX-16.) Mr. Whisenant worked closely with the father of Michael T. Lynch, Jr., current Vice-President and Chief Executive Officer of Laminations, in the conception and design of the '306 Patent. (Tr. at 6-7.)

  Laminations is the exclusive licensee of the '306 Patent. (Id. at 7.)
- 6. The subject of the '306 Patent is a plant cultivation apparatus and method. (LX-16.)

  The invention includes a "reservoir container assembly." (<u>Id.</u>)
- 7. The "Invention Preferred Embodiment" is depicted in the annotated version of Figure 1 of the '306 Patent, reproduced below.



As explained in Column 4, Lines 16 through 36:

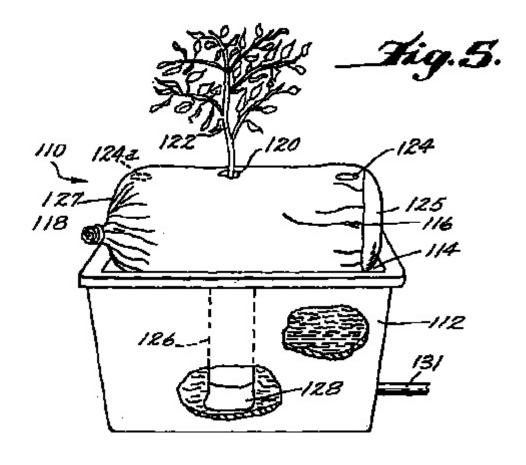
It is the bag container 16 itself which is filled with the growing medium 40, such as soil, in which two plants 22A, 22B are grown. This soil may be mixed with a number of different nutrients depending upon the type of plant to be cultivated. The first plant 22A grows from a first opening 20A in the top surface 18 of bag container 16, whereas the second plant 22B grows from a second opening 20B in the top surface 18 of bag container 16. In FIG. 1, the first opening 20A is shown to be located in the top surface 18 at one end of the oblong bag container 16. The second opening 20B is shown to be located at the other end of the bag container 16.

In addition to the first and second openings, the top surface of the bag container also contains a third opening 24. This third opening facilitates the evaporation of excess moisture which may be present inside the bag container 16. The third opening 24 is located at a site remote from both the first and second openings 20A, 20B.

Accordingly, salt and minerals which build up at the site of evaporation are kept away from the roots of developing plants 22A, 22B.

[emphasis added]

8. Annotated version of Figure 5 of the '306 Patent, reproduced below, depicts the Second Embodiment of the reservoir container assembly.



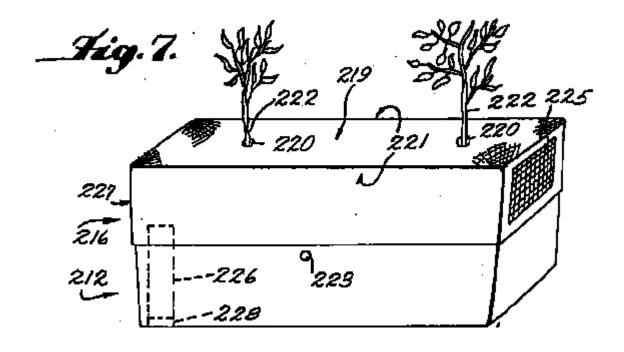
As described in Column 6, Lines 60, through Column 7, Line 6, of the '306 Patent:

As shown in [FIG. 5], second embodiment 110 includes a reservoir container 112 and a bag container 116. As in the preferred embodiment, container 116 contains a plant growing medium. The top surface of bag 116 is provided with an opening 120 through which a plant stem 122 extends as the plant increases in size. A separate opening 124 is spaced remotely from opening 120. Second opening 124 is provided to facilitate evaporation of excess moisture that accumulates in the interior of bag 116. . . . [L]eaching of minerals that are unfavorable to plant growth occurs at a site in the bag remote from the developing roots of the plant 122. If desired, opening 124 can be placed in the opposite walls 127 or 125 or both walls of bag 116. [emphasis added]

The openings are further explained at Column 7, Lines 47 though 57 and 59 through 63:

Because opening **124** is of larger surface area than is opening **120**, leaching of minerals takes place substantially in the vicinity of opening **124** and not in the vicinity of opening **120** through which plant growth occurs. By using a flexible rim for opening **120**, the edge of the opening is maintained in intimate contact with the stem growing therethrough. As a result, evaporation of water through opening **120** is minimized. A second evaporation opening **124a** indicated in broken lines may also be provided adjacent to the opposite end wall **127** of bag **116**. . . . The location of opening **120** relative to the upper surface of bag **16** [sic] is, of course, arbitrary. The only limitation that must be observed is that opening **120** be spaced a suitable distance from each of the evaporation openings. [emphasis added]

9. The annotated version of Figure 7 of the '306 Patent, reproduced below, depicts the Third Embodiment.



As described at Column 8, Lines 10 through 13, "[e]nds walls 225 and 227 of box 216 are formed of screen mesh through which evaporation and the leaching of undesirable minerals takes place."

#### a) The Prosecution History

- 10. An application for the '306 Patent was filed on July 2, 1990. (LX-6, Application for U. S. Patent.) At the time of its submission, the patent application contained fifty-one (51) claims. (Id. at 18-28.)
  - 11. As to the "Field of the Invention," the patent application stated:

The present invention relates to a cultivation apparatus and method which greatly minimizes the quantity of water and amount of labor required to grow plants to maturity. In particular, the invention relates to a water efficient and labor efficient apparatus and method for commercially growing tomatoes.

(<u>Id.</u> at 1.) As to the "Background of the Invention," the patent application discussed the shortfalls of the prior art:

These prior growing containers have also suffered the severe disadvantage of promoting the growth of undesirable parasites and fungi due to confinement of the growing medium in the containers. In addition, salt and mineral accumulation resulting from localized evaporation from the container has resulted in stunted plant growth or death of the plant. The only known solution to this detrimental mineral buildup has involved a significant investment in labor for attending to the condition of the soil in the container during the growing period. Accordingly, the disadvantages of such prior art growing containers have offset any advantages realized by their use.

(<u>Id.</u> at 1-2 (emphasis added).) Thus, the cultivation apparatus proposed in the patent

application is intended to reduce the accumulation of salt and other minerals by (1) maintaining the smallest opening possible around the plant's stem to minimize localized evaporation, and (2) utilizing another opening remote from the plant growth that "serves as an evaporation opening or vent" such that "salt deposits from evaporation will be maintained at [this] opening remote from [the] plant's roots." (Id. at 3-4.)

- 12. The Information Disclosure Statement filed with the patent application revealed twelve United States Patents as prior art. (LX-6, Information Disclosure Statement.)
- 13. On February 11, 1992, the United States Patent and Trademark Office issued an "Examiner's Action," notifying Mr. Whisenant that his claims were subject to a restriction or election requirement. (LX-6, Examiner's Action, at 1.) Mr. Whisenant's claims were subject to a restriction or election requirement because the inventions of certain groups were (1) "related as product and process of use," or (2) "related as combination and subcombination." (<u>Id.</u> at 2-3.) Ultimately, Mr Whisenant elected the invention of "Group V," comprised of Claims 1 through 33. (LX-6, Resp. to Election Requirement.)
- 14. On August 14, 1992, the patent examiner issued a "Notice of Allowability" as to Claims 1 through 33. (LX-6, Notice of Allowability.) Appended to the Notice of Allowability was a "Notice of References Cited," wherein the examiner listed as prior art five (5) additional patents four (4) United States Patents and one (1) patent from Great Britain. (LX-6, Notice of References Cited.)

15. The '306 Patent was issued on March 16, 1993. (LX-16.)

#### b) The Patent Claim at Issue Here

- 16. Claims 1 and 14 are the independent claims of the '306 Patent, with claims numbered 2 through 13 dependent, directly or indirectly, upon Claim 1, and claims numbered 15 through 33 dependent, directly or indirectly, upon Claim 14. (LX-16, Cols. 9 through 12.)
- 17. Laminations has asserted infringement of independent Claim 14. Claim 14 reads as follows:
  - 14. A reservoir container assembly for growing plants comprising
  - [1] first container means for holding a liquid and having a wall,
  - [2] second container means for holding a plant growing medium,
  - [3] conduit means extending from the interior of said first container means through said wall into the interior of said second container means,
  - [4] said conduit means having means for assisting the transfer of liquid from said first to said second container means.
  - [5] <u>said second container means having a surface portion that, in use, faces substantially vertically upwardly and a first opening in said surface portion for allowing plant growth therethrough,</u>
  - [6] <u>said second container means also having a second opening</u> <u>disposed remote from said first opening and for allowing evaporation of liquid therethrough</u>.

(LX-16, Col. 10, Lines 11 through 25 (emphasis added).)<sup>3</sup>

18. In short, Claim 14 describes a "reservoir container assembly for growing plants."

#### 3) The Garden Patch

- 19. The Garden Patch was developed by Messrs. Hawkins and McDowell in 2005, immediately after they left the employ of Laminations. (Tr. at 231.) The Garden Patch is marketed by Roma Direct. (Id. at 205.)
- 20. The Garden Patch consists of the following components: a bottom container; a top container; a plastic cover called a "nutrient patch"; two (2) "gate" pieces; and four (4) spikes used to hold the nutrient patch in place. (LX-4, Expert Report of Dr. James A. Kirk ("Dr. Kirk's Report"), Attachment ("Att.") C.) The Garden Patch is depicted in Attachment C to Dr. Kirk's report, a copy of which is included in the Appendix to this Memorandum and Order.
- 21. The Garden Patch is assembled as follows: First, the two gate pieces are slid into the open ends of the two "U" shaped enclosures on the bottom container. (LX-4, Att. D, at 1; LX-4, Att. E-1.) The top and bottom containers are then snapped together. (LX-4, Att. D, at 1; LX-4, Att. E-4.) After the top and bottom containers are assembled, the two rectangular openings are filled and packed with potting mix. (LX-4, Att. D, at 1.) Potting mix is then added to the rest of the planter. (Id.) When the planter is approximately halfway full of potting mix, the

<sup>&</sup>lt;sup>3</sup>The claim language generally in controversy has been underscored. Also, the numbers in brackets represent the elements of Claim 14.

mix should be thoroughly moistened to ensure compactness. (<u>Id.</u>) The planter is then filled with potting mix up to the top rim, with water added along the way to ensure proper fill. (<u>Id.</u>) Water is then added to the water well, which is located along the side of the assembled planter. (<u>Id.</u>)

- 22. Finally, the nutrient patch is placed on top of the potting mix. The nutrient patch is twenty-seven inches (27") long and eleven inches (11") wide. (LX-8, ¶ 16.) On the reverse side of the nutrient patch, there are sixteen (16) locations for plant growth holes spaced along the outside perimeter. Each plant growth hole has a diameter of 13/16 of an inch, and the center of each plant growth hole is 1 and 21/32 inches from the outside edge of the nutrient patch. (Id.) Each location for a plant growth hole is connected to the outside edge by a slit that is 5/32 of an inch wide and 1 and 1/4 inches long. (Id.) The fertilizer bags are located in the center of the nutrient patch.
- 23. Once the desired number of plants to be grown is determined, the corresponding number of plant growth holes and slits are cut out. The nutrient patch is then placed on top of the potting mix, with the fertilizer tube-side facing the potting mix. (LX-4, Att. D, at 1.) The outside edges of the nutrient patch should be parallel to the sides of the planter. (Id.) To plant, the outside edge is pulled back, and the plant is inserted under the slit into the potting mix. (Id.) The outside edge is then returned, with the plant growth hole surrounding the plant's stem.
  - 24. The nutrient patch does not completely cover the potting mix. While the nutrient

patch is 27" by 11", the top of the planter is twenty-eight and one-eighth inches (28 1/8") long and twelve and five-eighth inches (12 5/8") wide. (LX-8, ¶ 16.) Thus, there is a continuous space along the outside periphery of the nutrient patch that exposes the potting mix. (See LX-4, Att. E-6.)

- 25. Attachment E-6 of LX-4, a copy of which is included in the Appendix, depicts The Garden Patch as assembled, with the potting mix, the nutrient patch, and plants.
- 26. The purpose of the exposed perimeter is to collect rainwater that will eventually seep down into the water well. (Tr. at 209.) The exposed perimeter is not intended to manage evaporation. (Id. at 221-22.) Unmanaged evaporation, along with accumulation of salt and minerals, will occur along this border of potting mix. (Id. at 201, 221.)
- 27. The Garden Patch can be used to grow a variety of plants, such as tomatoes, roses, potatoes, watermelon, peppers, and corn. (LX-4, Att. D, at 4.)
- 28. Plant roots grow in a radiant-like manner from the stem. The roots project outwards, rather than straight down. (Id. at 221.)

#### II. <u>DISCUSSION</u>

#### A. Standard for a Preliminary Injunction

District courts are authorized to grant injunctions in order to prevent the infringement of patent rights. See 35 U.S.C. § 283. The moving party is entitled to a preliminary injunction if it establishes:

(1) a reasonable likelihood of success on the merits; (2) irreparable harm if an injunction is not granted; (3) a balance of hardships tipping in its favor; and (4) the injunction's favorable impact on the public interest.

Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1350 (Fed. Cir. 2001). No single factor is dispositive; "rather, the district court must weigh and measure each factor against the other factors and against the form and magnitude of the relief requested." Id. (quoting Hybritech Inc. v. Abbott Labs., 849 F.2d 1446, 1451 (Fed. Cir. 1988)). Nevertheless, "a movant cannot be granted a preliminary injunction unless it establishes both of the first two factors, i.e., likelihood of success on the merits and irreparable harm." Id. (citing Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc., 141 F.3d 1084, 1088 (Fed. Cir. 1998)).

#### 1) Reasonable Likelihood of Success on the Merits

Laminations, as the moving party, has the burden to demonstrate a reasonable likelihood of success on the merits as to its allegation that The Garden Patch infringes the '306 Patent. In order to make this showing, Laminations must present proof that (1) the '306 Patent is valid, and (2) Defendants infringed the '306 Patent. Pfizer, Inc. v. Teva Pharms., USA, Inc., 429 F.3d 1364, 1372 (Fed. Cir. 2005).

In resolving Laminations' Motion for Preliminary Injunction, the Court has assumed, without deciding, that the '306 Patent is valid and enforceable. The Court's analysis, therefore, is confined to the narrow issue of whether The Garden Patch infringes the '306 Patent. This determination consists of two steps: (1) construing the claim at issue, and (2) comparing the

properly construed claim to the allegedly infringing product. Playtex Prods., Inc. v. Proctor & Gamble Co., 400 F.3d 901, 905-06 (Fed. Cir. 2005). "To prove infringement, [Laminations] must show that [The Garden Patch] meets each claim limitation, either literally or under the doctrine of equivalents." Id. at 906 (emphasis added).

Laminations contends that The Garden Patch infringes Claim 14 of the '306 Patent. Defendants deny infringement, asserting that at least three elements of Claim 14 are absent from The Garden Patch. First, Defendants argue that The Garden Patch does not contain a "second opening disposed remote from said first opening." (Defs.' Proposed Findings of Fact, Dkt. Entry 35, ¶ 72.) Defendants argue that the exposed border of potting mix surrounding the outside periphery of the nutrient patch does not constitute a second opening disposed remote from the first opening. (Id.) Second, Defendants argue that The Garden Patch does not contain a "conduit means extending from the interior of said first container means through said wall into the interior of said second container means." In this regard, Defendants contend that the U shaped enclosures on the bottom container extend upward to, but do not protrude through, the top container. (Id. ¶ 68.) Finally, Defendants argue that The Garden Patch does not contain a "means for assisting the transfer of liquid from said first to said second container means." (ld. ¶ 71.)

For the reasons that follow, the Court concludes that The Garden Patch does not infringe Claim 14 because it does not contain a "second opening disposed remote from said

first opening."4

#### a) Claim Construction Principles

As the Supreme Court observed in Markman v. Westview Instruments, Inc., "[v]ictory in an infringement suit requires a finding that the patent claim covers the alleged infringer's product or process, which in turn necessitates a determination of what the words in the claim mean." 517 U.S. 370, 374 (1996) (internal quotation and citation omitted). In determining the scope of a claim, the Court is to consider the language of the claim itself, the written specification contained in the patent document, and the patent prosecution history. Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1561 (Fed. Cir. 1991).

"[W]ords of a claim 'are generally given their ordinary and customary meaning." Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." Id. at 1313.

In addition to the claim language itself, it is always necessary to review the specification in the patent because the "specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use

<sup>&</sup>lt;sup>4</sup>In light of this finding, it is unnecessary to address Defendants' second and third contentions.

it." <u>Vitronics Corp.</u>, 90 F.3d at 1582; <u>see also</u> 35 U.S.C. § 112, ¶ 1 ("The specification shall contain a written description of the invention . . . in . . . full, clear, concise, and exact terms."). "In light of the statutory directive that the inventor provide a 'full' and 'exact' description of the claimed invention, the specification necessarily informs the proper construction of the claims." <u>Phillips</u>, 415 F.3d at 1316. Thus, the specification is "highly relevant" to the analysis, and many times will be "dispositive." <u>Id.</u> at 1315 (<u>quoting Vitronics Corp.</u>, 90 F.3d at 1582).

In addition to this intrinsic evidence, extrinsic evidence, such as dictionaries, treatises, and expert testimony, may inform the claim construction analysis. <u>Id.</u> at 1317-18. Despite its utility, however, extrinsic evidence "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." <u>Id.</u> at 1319. "The best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history." <u>Multiform Desiccants, Inc. v. Medzam, Ltd.</u>, 133 F.3d 1473, 1478 (Fed. Cir. 1998).

# b) The Second Opening Disposed Remote from the First Opening

The inventor of the '306 Patent used the term "opening" in relation to a surface portion of the second container facing substantially vertically upwardly to describe the area where evaporation through the surface portion of the second container was to occur, and employed the phrase "disposed remote" to describe the location of the second opening in the surface portion. There is no evidence that the inventor intended these terms to have anything but their

ordinary and customary meaning.

An "opening" is ordinarily understood as a gap, a passage, or an open space. (See LX-23 ("opening" defined as an "open space serving as a passage or gap").) The meaning of opening, therefore, is straightforward. Laminations, however, has injected ambiguity into the construction of this element by implying that the open space need not be completely bounded. Whether the second opening means a bounded or unbounded open space can be resolved by an examination of the claim language and the specification.

The term "opening" appears twice in Claim 14 – the first "opening" and the second "opening." "[C]laim terms are presumed to be used consistently throughout the patent, such that the usage of a term in one claim can often illuminate the meaning of the same term in other claims." Research Plastics, Inc. v. Fed. Packaging Corp., 421 F.3d 1290, 1295 (Fed. Cir. 2005). This presumption logically takes on greater force where, as here, the identical terms are used in the same claim. In this regard, Mr. Whisenant described the "first opening" in the surface portion of the second container in connection with the second embodiment as follows: "By using a flexible rim for opening 120, the edge of the opening is maintained in intimate contact with the stem growing therethrough." (LX-16, Col. 7, Lines 51 through 53.) The natural inference from this description is that the first opening must be bounded on all sides, an inference supported by Figures 1, 5, and 7 of the '306 Patent. Therefore, the opening, as that

term is used in relation to the "second opening," must be an open space bounded on all sides.5

The phrase "disposed remote" is also defined by its ordinary and customary meaning. The term "disposed" means "to assign to a particular place or position." Webster's Third International Dictionary 654 (unabridged ed. 1993). The term "remote" is understood as "far removed" from a particular point. (See Defs.' Proposed Findings of Fact, Dkt. Entry 35, ¶ 72.) Thus, as used in Claim 14, the second opening is "disposed remote" from the first opening when it is located at a point "far removed" from the first opening.

How "far removed" the second opening must be from the first opening can be ascertained by considering the objective of the '306 Patent, as well the written specification. One of the disadvantages of the prior art noted by Mr. Whisenant was the accumulation of salt and minerals caused by localized evaporation around the plant growth, the consequence of which was "stunted plant growth or death of the plant." (Id., Col. 1, Lines 31 through 34.) The '306 Patent purports to eliminate this disadvantage with an opening disposed remote from the plant growth. This, in turn, will facilitate evaporation, and the "salt and minerals [that] build up

<sup>&</sup>lt;sup>5</sup>To be sure, the first opening and second opening are not identical in all respects. For instance, the inventor describes the second opening as larger than the first opening in order to facilitate evaporation and accumulation of salt and minerals away from the plant growth. (LX-16, Col. 7, Lines 47 through 50; see also id., Col. 10, Lines 61 through 63.) The inventor also describes the first opening as having a flexible or adjustable rim in order to maintain "intimate contact" with the plant. (Id., Col. 7, Lines 51 through 53; see also id., Col. 10, Lines 67 through 68, through Col. 11, Lines 1 through 2.) Regardless of whether the openings are large or small, adjustable or inelastic, the first opening and second opening are consistent in at least one critical respect – they are open spaces bounded on all sides.

at the site of evaporation are kept away from the roots of developing plants." (Id., Col. 4, Lines 30 through 36; see also id., Col. 7, Lines 1 through 4; Col. 8, Lines 10 through 13.) This objective, however, can be achieved only if the opening surrounding the plant growth is "spaced a suitable distance from . . . the evaporation openin[g]." (Id., Col. 7, Lines 62 through 63.) Therefore, the second opening is "disposed remote" from the first opening when it is located a suitable distance away from the first opening ensuring that evaporation and the accumulation of salt and minerals does not occur anywhere near the growing plant.

In summary, after considering the relevant language of Claim 14, the ordinary and customary meanings of "opening," "disposed," and "remote," and the written specification of the '306 Patent, the Court construes the sixth element of Claim 14 as: a second open space in the surface portion of the second container, bounded on all sides, that is located a sufficient distance away from the first opening to ensure that evaporation and the accumulation of salt and minerals do not occur adjacent to the growing plant.

#### c) Infringement Analysis

"Patent infringement occurs when a device . . . that is literally covered by the claims or is equivalent to the claimed subject matter, is made, used, or sold, without the authorization of the patent holder, during the term of the patent." Multiform Desiccants, 133 F.3d at 1476. "Infringement requires that every limitation of a claim be met in the accused structure either exactly or by an equivalent." Roton Barrier, Inc. v. Stanley Works, 79 F.3d 1112, 1125 (Fed.

Cir. 1996). "[T]he issue of literal infringement may be resolved with the step of claim construction, for upon correct claim construction it may be apparent whether the accused device is within the claims." Multiform Desiccants, 133 F.3d at 1476. However, "[a] device that does not literally infringe a claim may nonetheless infringe under the doctrine of equivalents if every element in the claim is literally or equivalently present in the accused device." Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1423 (Fed. Cir. 1997).

In this matter, Laminations has failed to demonstrate a reasonable likelihood of proving that the sixth element of Claim 14, when properly construed, is present literally or equivalently in The Garden Patch. In other words, the surface portion of The Garden Patch does not have, literally or equivalently, a "second opening disposed remote from said first opening."

To begin with, there is some merit to Defendants' argument that The Garden Patch does not have a second opening. (See Defs.' Proposed Findings of Fact, Dkt. Entry 35, ¶ 72.) The nutrient patch, the thin plastic cover on the surface of The Garden Patch, has marked locations for circular plant growth holes for each plant that is inserted into the potting mix. In addition, the user of The Garden Patch must also cut out the 1 1/4" by 5/32" strip that connects the plant growth hole with the outside edge of the nutrient patch. The dimensions of the nutrient patch are smaller than that of the top rim of the planter. Thus, when the nutrient patch is placed on the surface of the potting mix, there is an exposed perimeter of potting mix surrounding the nutrient patch. The plant growth hole, therefore, is in communication with the exposed border

of potting mix. If, as Laminations contends, the outside periphery is the "second opening" provided for in Claim 14, the result is either (1) the first opening is in communication with the second opening, i.e., is not remote, or (2) there is only one continuous opening on the top surface of the planter. The latter is obviously not contemplated by Claim 14, and the former finds no support in the language of Claim 14 or the written specification of the '306 Patent. Had the inventor intended this result, he surely could have included language to this effect. Cf.

Panduit Corp. v. HellermannTyton Corp., 451 F.3d 819, 822, 829 (Fed. Cir. 2006) (claim element that "an opening formed in the abutment portion of the projection is in communication with an aperture formed in a side wall" is construed as requiring a "passage through which wires may be routed" between the opening and the aperture).

But even if the outside periphery of the exposed potting mix constitutes a second opening, The Garden Patch does not literally infringe this element of Claim 14. The outside periphery is one opening because it is bounded on all sides by the top rim of the planter and the outside edge of the nutrient patch. This opening, however, is not disposed remote from the plant growth hole because the opening, at its nearest point, is only 1 1/4" away from the plant growth hole, and is connected to the exposed border of potting mix by the slit cut in the surface portion to establish the hole for the plant. To be disposed remote, the second opening must be located a suitable distance from the first opening to ensure that evaporation and the accumulation of salt and minerals occurs away from the roots of the plant. An opening that is 1

1/4" away from the plant growth hole and is connected by a slit cut in the surface portion does not meet this limitation. Mr. McDowell testified, uncontradicted, that plant roots grow in a radiant-like manner from the stem. In other words, the roots project outward, rather than straight down. As such, it is evident that evaporation and the accumulation of salt and minerals will occur near the roots of the plant. As such, The Garden Patch does not contain a second opening disposed remote from the first opening.

Laminations insists that The Garden Patch literally infringes this element of Claim 14, relying upon the expert opinion of Dr. James A. Kirk. (See Pl.'s Proposed Findings of Fact, Dkt. Entry 34, ¶¶ 59-61.) In assessing this element of Claim 14, Dr. Kirk concluded that the outside periphery of the exposed potting mix surrounding the nutrient patch is not one continuous opening, but rather four separate rectangular openings. (LX-4, Dr. Kirk's Report, § 5.5, at 9; see also Tr. at 186.) Dr. Kirk's conclusion is illustrated in Attachment H-8 to his report, a copy of which is included in the Appendix. Dr. Kirk explained his conclusion:

When I looked at the plastic sheet, which is a rectangle, and then I looked at the opening of the box, which is another rectangle, that suggested that there was a[n] equal spacing on each of the four sides of the rectangle from the end of the rectangle, the plastic sheet [i.e., the nutrient patch], to the box. Therefore, I concluded it was logical to show that that spacing between the rectangle of the plastic sheet and the rectangle of the box was an opening, and I came up with four openings.

(Tr. at 187; <u>see also id.</u> at 192.) Dr. Kirk then arbitrarily selected one of the four "openings" to serve as the "second opening disposed remote from said first opening." (LX-4, Dr. Kirk's

Report, § 5.5, at 9-10; see also Tr. at 188, 191; LX-4, Att. H-9 (a copy of which is included in the Appendix).) In Dr. Kirk's view, however, any of the four rectangular openings will satisfy this element of Claim 14, even the "opening" nearest to the plant growth hole. (LX-4, Dr. Kirk's Report, § 5.5 n.7, at 10; Tr. at 188,191-92.)

Dr. Kirk's strained interpretation of this element is not persuasive. First, the outside periphery of potting mix surrounding the nutrient patch is one continuous opening, not four rectangular openings. In this regard, the term "opening" as used in Claim 14 means an open space bounded on all sides. The four rectangular "openings" identified by Dr. Kirk do not meet this definition because each purported opening has two sections that are unbounded. Second, this element of Claim 14, naturally read, requires that the entire second opening be disposed remote from the first opening. Under Dr. Kirk's interpretation, however, only portions of the second opening are disposed remote from the first opening. There still remains an area of the exposed border of potting mix in close proximity to the plant growth hole, an area where salt and minerals will accumulate. Accordingly, Dr. Kirk's opinion on the issue of literal infringement is not compelling.

Laminations argues alternatively that the sixth element of Claim 14 is infringed under the doctrine of equivalents. (Pl.'s Proposed Findings of Fact, Dkt. Entry 34, ¶ 62.) Under this doctrine of patent law, "an accused product that differs from the claim, and thus does not literally infringe, nonetheless infringes if its difference from that claim is insubstantial from the

perspective of one of ordinary skill in the relevant art." Athletic Alternatives, Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1581 (Fed. Cir. 1996). Whether the difference is insubstantial is generally ascertained by determining whether "the asserted equivalent perform[s] substantially the same function in substantially the same way to accomplish substantially the same result." Tex. Instruments, Inc. v. U.S. Int'l Trade Comm'n, 805 F.2d 1558, 1571 (Fed. Cir. 1986).

In this respect, Laminations relies upon the testimony of Dr. Kirk to advance this contention. During the preliminary injunction hearing, the Court asked Dr. Kirk for an opinion as to whether The Garden Patch configuration satisfies the doctrine of equivalents as to the second opening. (Tr. at 202.) Dr. Kirk answered:

The second opening is disposed remote . . . having a second opening disposed remote from said first opening, I would say, the second opening has got as its function for allowing evaporation there through and that the way it accomplishes that is it has to be disposed remote from the said first opening. And the result of having it – the result of having it remote from the first opening is that evaporation, which is coming out of the second opening, is not going to produce salts that may hurt the root, and that, therefore, improves the apparatus for growing plants.

(<u>Id.</u> at 203.)

Dr. Kirk's testimony does not suffice to demonstrate infringement under the doctrine of equivalents. The result sought to be achieved by the second opening in Claim 14 of the '306 Patent is to channel evaporation and the accumulation of salt and minerals away from the roots of the growing plant. The exposed periphery of The Garden Patch does not accomplish

substantially the same result because evaporation, along with the accumulation of salt and mineral deposits, will in fact occur near the plant growth hole.<sup>6</sup>

Laminations contends that simply because "some evaporation of water may occur" at or near the plant growth hole does not avoid infringement under the doctrine of equivalents because "inefficient infringement is still infringement." (Pl.'s Counter-Statement to Defs.' Proposed Findings of Fact, Dkt. Entry 37, ¶ 12 (quoting Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855, 859 (Fed. Cir. 1988).) In Laitram Corp., the claim at issue involved the spacing of links in a module, the purpose of the spacing being to "minimize bending and maximize shear." 863 F.2d at 857-58. The appropriate inquiry under the doctrine of equivalents, as explained by the court, was whether the accused device and "the claimed invention are substantially the same, used in substantially the same way, to achieve substantially the same result." Id. at 859. The court found infringement under the doctrine of equivalents because, even though the infringing device did not minimize bending and maximize sheer to the extent of the claimed invention, the infringing device nevertheless substantially accomplished this result. Id. at 859, 861.

In this matter, the purpose of a second opening disposed remote from the first opening is to channel evaporation and the accumulation of salt and minerals away from the first opening

<sup>&</sup>lt;sup>6</sup>Indeed, evaporation will occur at the 1 1/4" by 5/32" strip that connects the plant growth hole with the outside edge of the nutrient patch.

and the growing plant. The '306 Patent manages evaporation in order to avoid harmful accumulation of salt and minerals at the location of the evaporation. With The Garden Patch, however, evaporation is unmanaged. In turn, the accumulation of salt and minerals, will occur at the area around the plant. Moreover, unlike the '306 Patent, the open periphery of the Garden Patch is intended to facilitate natural watering, a function not served at all by the '306 Patent. Thus, unlike <a href="Laitram Corp.">Laitram Corp.</a>, where the infringing device accomplished substantially the same result, albeit in a less efficient manner, The Garden Patch yields the very result sought to be avoided by the '306 Patent. Missing from The Garden Patch is an element that manages evaporation to prevent accumulation of salt and minerals.

"Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole." Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997). The second hole disposed remote from the first hole in the surface portion of the second container is an element of Claim 14 that is simply not found in the accused device. Therefore, The Garden Patch does not satisfy the doctrine of equivalents with respect to the sixth element.

Laminations has observed that "Defendants could have easily avoided the '306 patent using non-infringing prior art designs." (Pl.'s Proposed Findings of Fact, Dkt. Entry 34, ¶ 72.) It appears that, by eschewing managed evaporation claimed by the '306 patent, Defendants did

just that. In summary, the Court concludes that Laminations has failed to demonstrate a reasonable likelihood of success of proving the sixth element of Claim 14, when properly construed, is infringed, literally or equivalently, by The Garden Patch.

#### 2) Irreparable Harm

Because Laminations has not shown a reasonable likelihood of showing patent infringement, it is not entitled to a presumption of irreparable harm. See Eli Lilly & Co. v. Am.

Cyanamid Co., 82 F.3d 1568, 1578 (Fed. Cir. 1996). Nor does the evidence suggest the fact of irreparable harm.

First, Laminations made no showing of lost sales as a result of the marketing of The Garden Patch, even though it had been marketed for about one year at the time of the preliminary injunction hearing. On the contrary, its CEO testified he could not quantify lost sales attributable to the marketing of the accused product. (Tr. at 87-88, 125.) Moreover, monetary damages attributable to patent infringement are plainly calculable, militating against a finding of irreparable harm. Although Laminations questions the ability of Defendants to satisfy a monetary judgment, the evidence submitted on this point, a Dun & Bradstreet report concerning Defendants' finances is conceded by Laminations to be unreliable, (Pl.'s Reply to Defs.' Proposed Findings of Fact, Dkt. Entry 37-2, ¶ 92, at 31), and Mr. McDowell testified that Defendants could satisfy a compensatory damage award. (Tr. at 222.) Thus, Laminations has not substantiated its claim that Defendants could not pay a compensatory damage award.

Finally, the fact that Laminations delayed seeking preliminary injunctive relief for a number of months after procuring a copy of the accused device also belies its claim of irreparable injury.

See <u>High Tech Med. Instrumentation, Inc. v. New Image Indus., Inc.</u>, 49 F.3d 1551, 1557 (Fed. Cir. 1995).

The Federal Circuit Court of Appeals has made clear that there is no presumption that money damages will be inadequate where, as here, a patentee fails to show a likelihood of prevailing on the merits. <u>Id.</u> at 1556. In view of the delay in seeking extraordinary injunctive relief, the absence of any evidence of lost sales or business, the lack of more than a scintilla of evidence of product confusion, and the lack of probative evidence of Defendants' inability to satisfy a monetary judgment, a finding of irreparable harm is not indicated here. <u>See Circle R, Inc. v. Smithco Mfg., Inc.</u>, 919 F. Supp. 1272, 1302-03 (N.D. lowa 1996). For this reason, as well, Laminations is not entitled to a preliminary injunction.

#### **III. CONCLUSION**

To prevail on a motion for preliminary injunction in a patent infringement lawsuit, the

<sup>&</sup>lt;sup>7</sup>Because Laminations has failed to demonstrate a reasonable likelihood of success on the merits or that it will suffer irreparable harm if an injunction does not issue, there is no need to consider the other two factors of the preliminary injunction analysis. See Reebok Int'l, Ltd. v. J. Baker, Inc., 32 F.3d 1552, 1556 (Fed. Cir. 1994). It should be noted, however, that the balance of harms militates against preliminary injunctive relief. Defendants testified credibly that a preliminary injunction would close their business. (Tr. at 222-24.) By way of contrast, Laminations is a large company involved in a number of lines of plastics products, and it has not shown that denial of the injunction pendente lite will cause it substantial injury.

moving party must show a reasonable likelihood that, at trial, it will prove by a preponderance of the evidence that the defendant's product infringes each and every element of its asserted claim. Laminations has failed to carry its burden. Moreover, absent a presumption of irreparable harm that applies where a reasonable likelihood of prevailing is shown, the evidence in this case does not support a finding of irreparable harm pendente lite. Accordingly, Laminations' Motion for Preliminary Injunction will be denied. An appropriate Order follows.

s/ Thomas I. Vanaskie

Thomas I. Vanaskie United States District Judge

### IN THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

**LAMINATIONS**, INC., a Pennsylvania :

Corporation :

Plaintiff :

VS. : 3:CV-06-2108

(JUDGE VANASKIE)

ROMA DIRECT MARKETING LLC, :

a/k/a The Garden Patch, JOHN T. : HAWKINS, KENNETH McDOWELL :

**Defendants** 

#### **ORDER**

NOW, THIS 19th DAY OF APRIL, 2007, for the reasons set forth in the foregoing Memorandum, IT IS HEREBY ORDERED THAT:

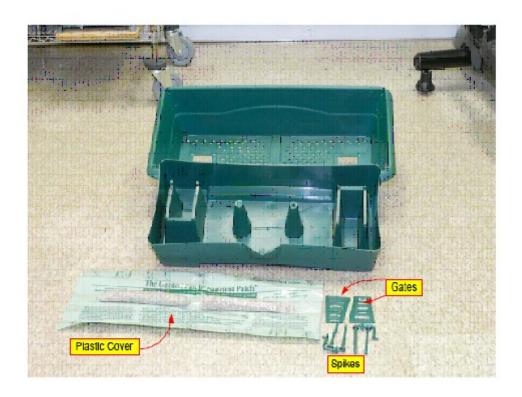
- 1. Plaintiff's Motion for Preliminary Injunction (Dkt. Entry 8) is **DENIED.**
- 2. A Case Management Conference shall be conducted on **May 9, 2007, at 10:00 a.m.** in Room 401 of the William J. Nealon Federal Building & U.S. Courthouse, 235 North Washington Avenue, Scranton, PA.

s/ Thomas I. Vanaskie

Thomas I. Vanaskie United States District Judge

### **APPENDIX**

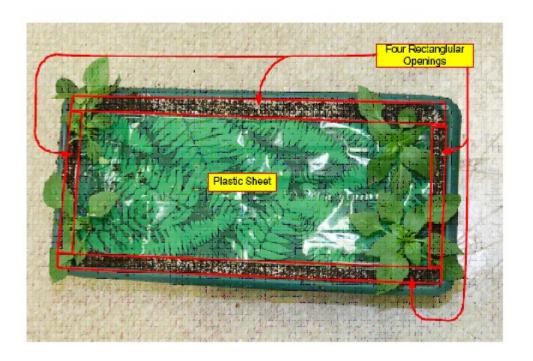
#### Attachment C Garden Patch Parts



Attachment E-6 Garden Patch with Growing Medium, Plastic Cover, and Plants



Attachment H-8 Garden Patch



Attachment H-9 Garden Patch

